



Doosan Heavy Industries & Construction

Doosan Heavy Industries & Construction '21 1Q Business Results Review



2021 April

Disclaimer

This presentation was prepared for the convenience of investors. The financial figures contained in this presentation are K-IFRS consolidation and DHI operation¹⁾ basis.

Also, this presentation has been prepared prior to the completion of external audit, only for the convenience of investors. Accordingly, it may be subject to change during the final audit process.

This presentation is provided only as a reference material. Doosan Heavy Industries and Construction assumes no responsibility for your decisions.

1) DHI Operation : DHIC Parent & Overseas Subsidiaries(DPS and etc.), & Doosan Mecatec

Table of Contents

- **DHIC 1Q result**
 - Summary
 - Major results
- Financial Structure Improvement
- '21 Business plan
- New business
 - New/renewable, Hydrogen, GT, SMR
- Back up

DHIC_Summary

1Q orders recorded KRW 1.3T, highly increased YoY, sales slightly decreased due to COVID-19. Operating profit and Net profit turned to black thanks to the last year's restructuring.

(Unit : KRW B, %)

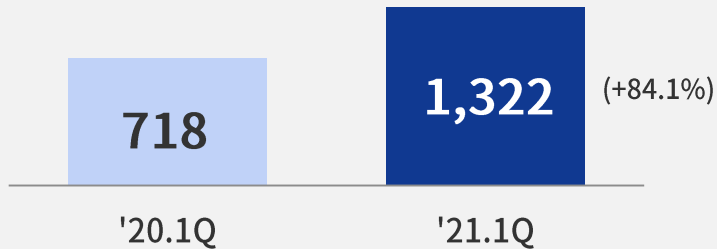
	'20.1Q	'21.1Q	YoY
Orders	718	1,322	604
Backlog	13,806	14,408	602
Sales	1,424	1,223	-201
OP	-135	58	193
OPM(%)	-9.5%	4.8%	14.3%
EBITDA	-79	109	188
Non-OP	-225	68	293
Interest	-52	-48	4
FX	24	-13	-37
Others	-197	129	326
Net P/L	-362	97	459
Net Debt	5,152	4,826	-326
Liability Ratio	278.5%	246.2%	-32.3%p

DHIC_ Major Results

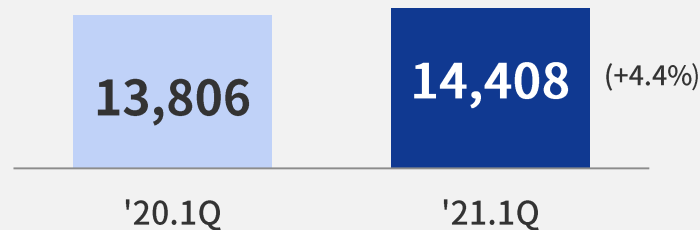
1Q orders achieved KRW 1.3T including Saudi's Yanbu RO desalination, etc. Sales declined slightly YoY, while OP significantly improved thanks to cost saving from the last year's restructuring.

Orders/ Backlog

Orders



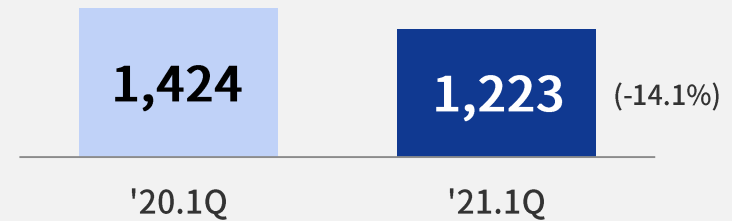
Backlog



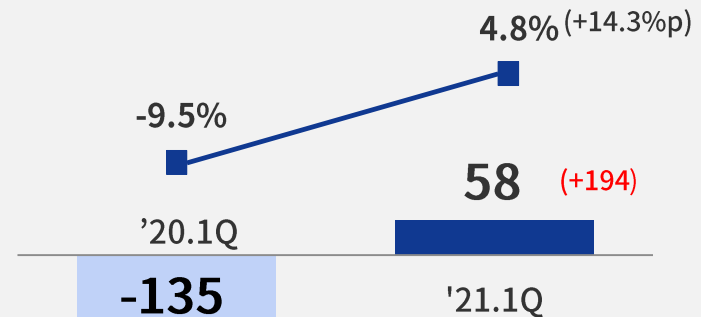
Sales/ OP(%)

(Unit: KRW B, %)

Sales



OP(%)

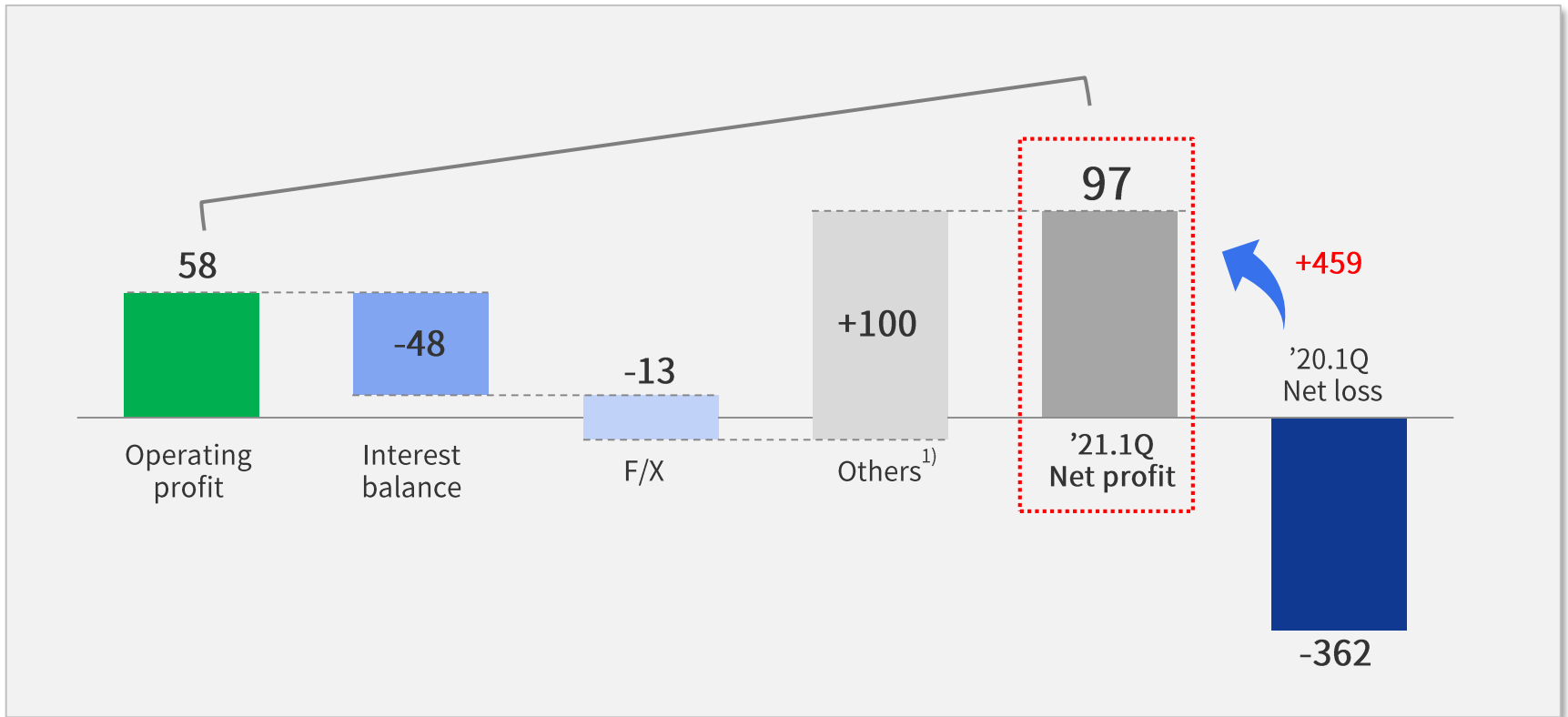


DHIC_Major Results

Despite interest cost & FX loss, net profit significantly improved YoY to KRW 97B thanks to operating profit turnaround and Doosan Bobcat PRS¹⁾ valuation profit.

Net Profit

(Unit : KRW B)



1) Doosan Bobcat PRS(Price Return Swap) valuation profit 136B, Doosan Fuel Cell stock valuation loss -28B. etc

P/L (Separate)

(Unit : KRW B, %)

	'20.1Q	'21.1Q	YoY
Orders	470	1,084	614
Sales	925	816	-109
OP	-59	55	114
OPM(%)	-6.4%	6.7%	13.1%p
EBITDA	-19	93	112
Non-OP	-243	82	325
Interest	-39	-39	-
FX	-14	-2	12
Others	-190	124	314
Net P/L	-301	107	408

P/L (Consolidated)

(Unit: KRW B, %)

	'20.1Q	'21.1Q	YoY
Sales	3,837	4,005	168
OP	56	372	316
OPM(%)	1.5%	9.3%	7.8%p
EBITDA	167	491	324
Non-OP	-369	13	382
Interest	-105	-91	14
FX	25	-8	-33
Others	-289	111	400
Net P/L	-371	248	619

Table of Contents

- DHIC 1Q result
 - Summary
 - Major results
- **Financial Structure Improvement**
- '21 Business Plan
- New business
 - New/renewable, Hydrogen, GT, SMR
- Back up

Financial Structure Improvement

Item	Time	Progress	Financial impact
• Restructuring	~ Dec., '20	One-off restructuring cost of KRW 184B	Operating profit over KRW 180B annually improved
• Asset sell-off (Club Mow CC)	May, '20	Sold for KRW 185B. KEXIM/KDB debt repayment completed	Debt of KRW 124B reduced
• DFC ¹⁾ 's share bestowal	Nov., '20	Doosan Fuel Cell's shares of 12,763,557 donated by the Owner family	Equity of KRW 600B improved
• Capital injection	Dec., '20	Repaid KEXIM/KDB debt of KRW 1,212B	Equity of KRW 1,212B increased Debt of KRW 1.2T reduced
• Contribution in-kind	Apr., '20	Doosan Fuel Cell's shares of 47,843,956 contributed in-kind by Doosan Corp	Equity of KRW 544B increased
• Doosan Infracore shares sell-off	1H, '20	in progress (KRW 850B)	Debt of KRW 850B reduced and others, cash-in from merger: KRW 228B cashable assets : KRW 123B

1) Doosan Fuel Cell

Table of Contents

- DHIC 1Q result
 - Summary
 - Major results
- Financial Structure Improvement
- **'21 Business plan**
- New business
 - New/renewable, Hydrogen, GT, SMR
- Back up

'21 Business Plan (DHIC)

Plan of orders increased by 57% YoY, sales by 11%, and turn into operating surplus

(Unit : KRW B, %)

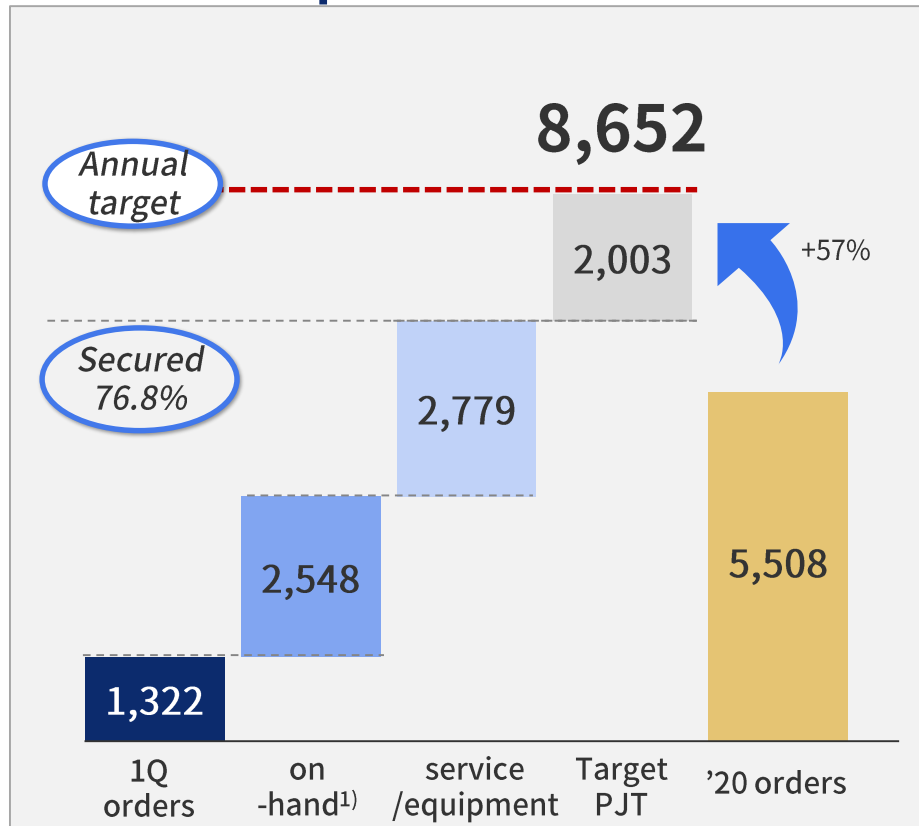
	2019	2020	2021(P)	YoY
Orders	4,116	5,508	8,652	3,144
Backlog	13,653	14,309	17,048	2,739
Backlog/sales(year)	2.4	2.7	2.9	0.2
Sales	5,677	5,291	5,898	607
OP	152	-545	221	766
OPM(%)	2.7%	-10.3%	3.8%	14.1%p

'21 New Orders Plan

1Q orders of 1.3T. and plan to achieve annual orders to KRW 8.6T through on-hand projects.

'21 orders plan

(Unit : KRW B)



1Q orders of KRW 1,322 B

- Saudi desalination(Yanbu 4 RO) 782b.

Secured KRW 2.5T of on-hand

- Vietnam Vung Ang 2 coal PP 0.9T
- Guam Ukudu CCPP 0.6T
- Nepal hydropower 0.4T
- Domestic offshore wind 0.2T
- Domestic renewable complex 0.4T, etc.

Target projects in progress

- Overseas civil/architecture 0.5T
- Domestic cogeneration 0.3T, etc.

1) on-hand : projects, recognized as orders, by owner's PF closing.
Highly likely to recognize orders within this year.



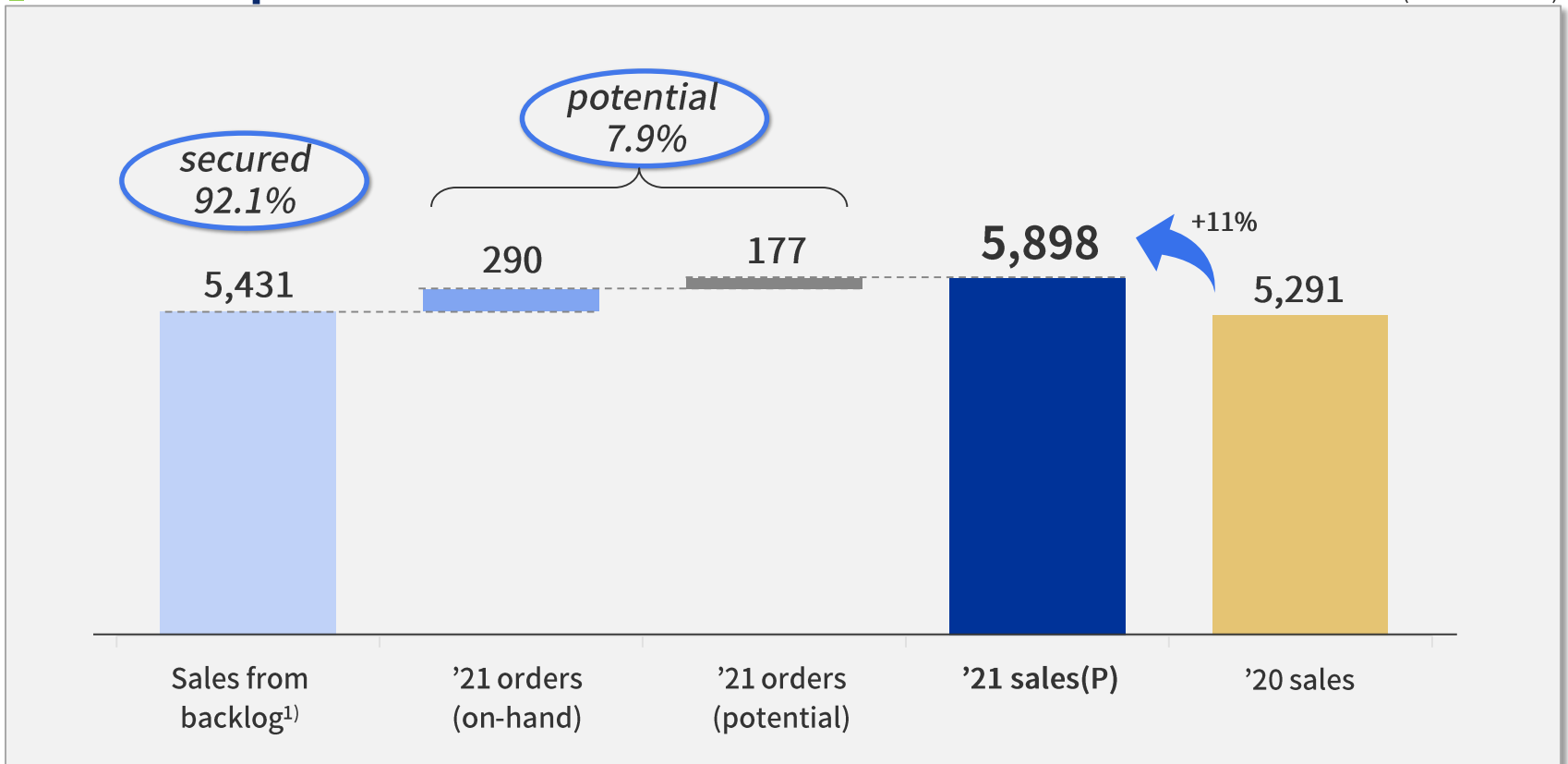
Doosan Heavy Industries & Construction

'21 Business Plan_Sales

Plan annual sales of KRW 5,898B including secured sales(92%) from backlog.

'21 sales plan

(Unit : KRW B)



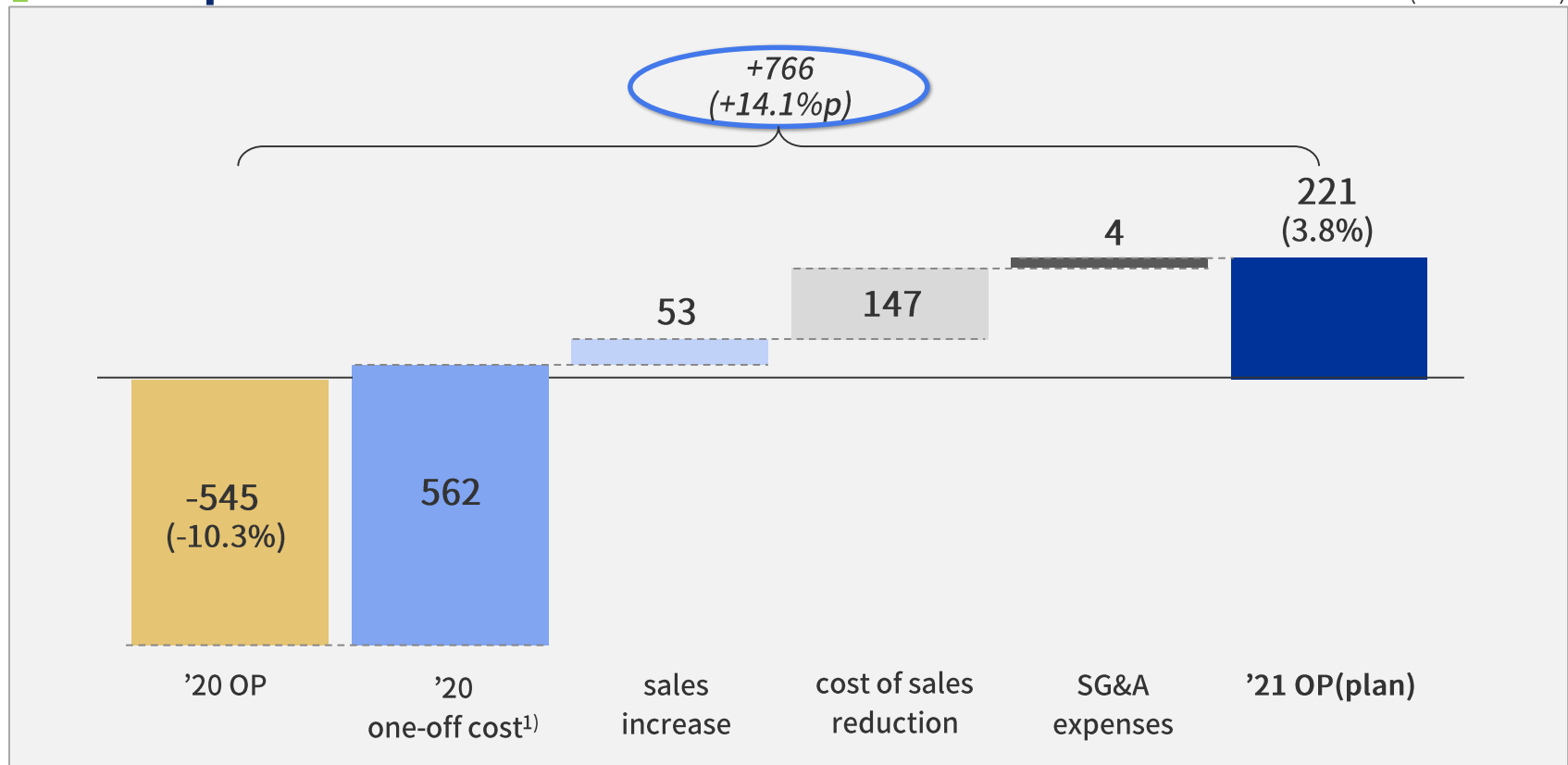
1) including sales from casing & forging business, and overseas subsidiaries

'21 Business Plan_OP

Plan annual operating profit of KRW 221B 14% increased YoY through cost saving, and elimination of the last year's one-off costs.

'21 OP plan

(Unit : KRW B)



1) Indian projects cost overrun -286B, restructuring KRW -184B, compensation to domestic client(KRW -92B)

Table of Contents

- DHIC 1Q result
 - Summary
 - Major results
- Financial Structure Improvement
- '21 Business plan
- **New business**
 - New/renewable, Hydrogen, GT, SMR
- Back up

New Business

Plan a portfolio transformation from conventional business to clean energy business by increasing the proportion of new business to 62% in 5 years

Change of Business Proportion

(unit : trillion won)

Focus on investment and development with the major 4 Pillars of “LNG, New/renewable, Hydrogen, SMR”

[Short Term]

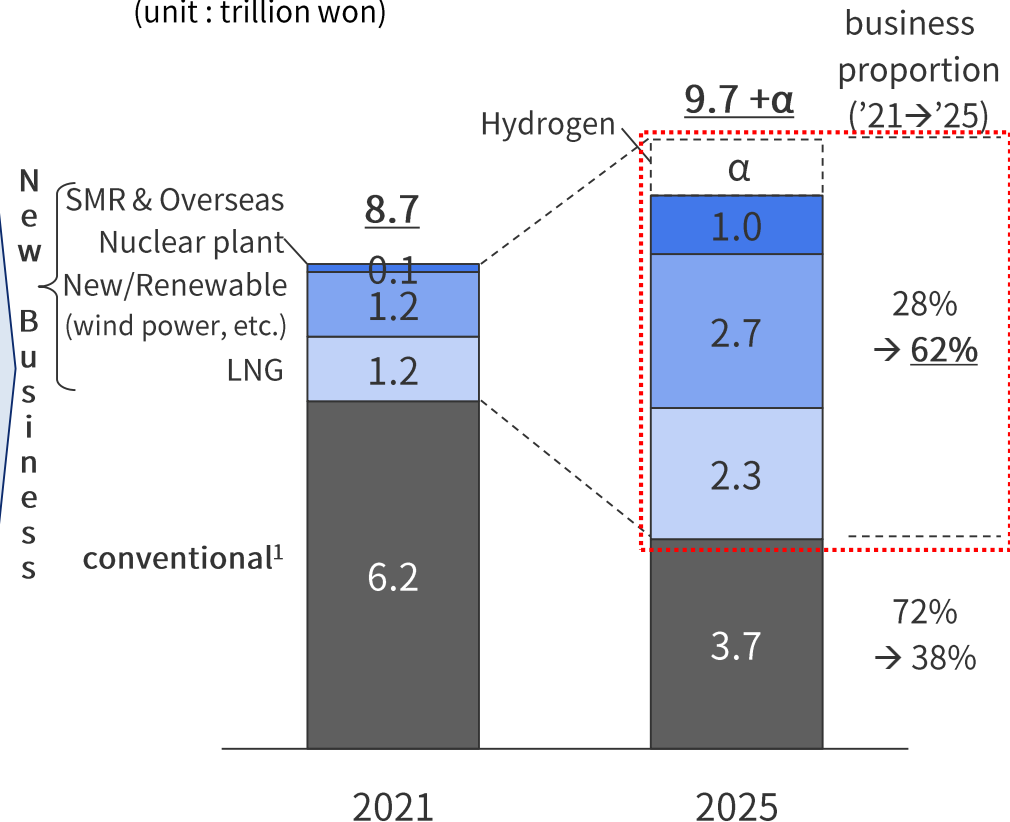
- Complete clean energy business model

[Mid Term]

- Expand to overseas market based on domestic performance

[Long Term]

- Grow into a global leader in clean energy



New Business – Leading Provider of Clean Energy in Korea

Lead power plant market by accelerating portfolio transformation to clean energy

New/ Renewable

- Strengthen the position of No. 1 offshore wind power in Korea, and grow upto the global top-tier & total wind power provider in the mid/long term
- Provide total solutions for new/renewable and distributed power markets of solar, hydro, ESS, etc.

Hydrogen

- Occupy hydrogen generation market, expected for high demand of clean hydrogen, in advance
- Provide total solution by link of hydrogen generation and clean hydrogen supply

Gas Turbine

- Rank as the Global Top 4 level by the leading position in Korean CCPP market and accelerating penetration into overseas market
- Expand to hydrogen turbine area in the mid/long term

SMR

- Occupy the next generation nuclear power(SMR) market in advance and hold the Global top player position, backed by large sized nuclear power export

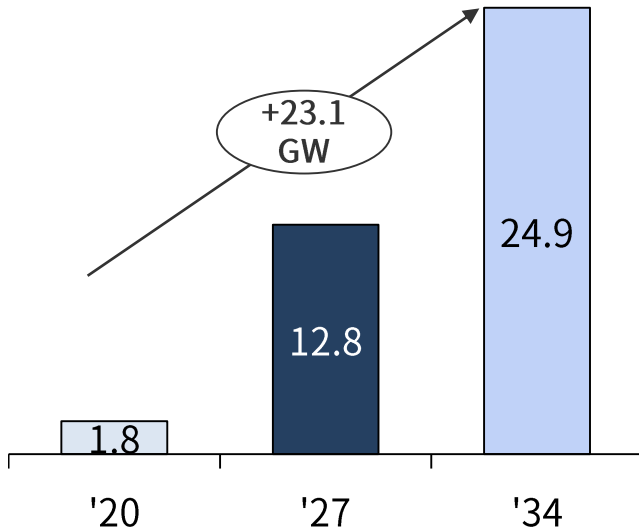
Wind Power

Provide excellent utilization through the application of optimized models to Korean environment and secure competitive advantage by the stable supply chain and the optimal operation support through digital solution utilization

Market Forecast

- Forecast to supply additional 23.1 GW wind power in Korea until 2034

Wind power¹ supply plan in Korea Unit (GW)

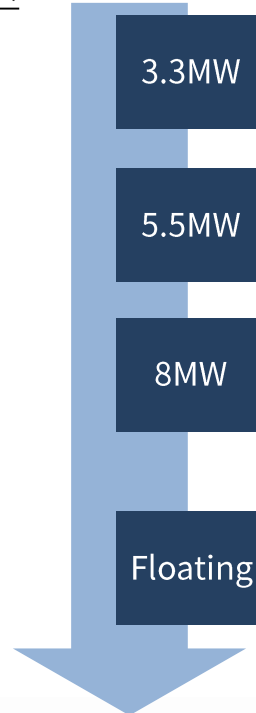


1. The 9th electricity demand supply program



Line-up of Wind Generator Models

- Track record of the total 239.5MW (on-shore 143.5MW, off-shore 96MW)
- Expect M/S expansion based on No.1 offshore wind power track records in Korea



- Secured track record of the total 78 generators in Tamra and the Southwestern maritime complex.
- Completed development in '19 and expand supply by orders of Jeju offshore wind power complex in '21Y.
- Release the products in '22Y
- **Secure utilization's competitive advantage in Korean offshore wind power market** (over 30% in the basis of wind speed 7m/s)
- Expect to commercialize floating model of 8MW in '25Y
 - Proceed the national task with Gyeongnam province/KOEN

Achieve O&M optimization through digital solution-based real-time monitoring and predictive diagnosis

Hydrogen

Secure the unrivaled hydrogen power technology and propel to supply various clean hydrogen solution

Practical Use of Hydrogen(Power)

Hydrogen Gas Turbine

- Complete preparation of hydrogen turbine until '25
 - Developing Hydrogen combustion's core technology

Fuel Cell

- Incorporated Doosan Fuel Cell as a subsidiary
 - No.1 power fuel cell corporation¹ in Korea

❖ Consume 25,000 ton annually, if mixed by 50% into a 550MW combined cycle power plant

➔ Same level as 127,000 Hyundai Nexoes' annual use

Hydrogen Production

C
l
e
a
n

H
y
d
r
o
g
e
n

Blue Hydrogen

- Secure and expand blue hydrogen's production foundation
 - Apply carbon capture technology on liquefaction plant in Changwon

Green Hydrogen

- Secure and expand business of green hydrogen production technology by using wind and sunlight
 - Under proof with Jeju Wind Hydrogen and East Sea Sunlight Hydrogen

Nuclear Hydrogen

- Propel to secure hydrogen production technology by using nuclear power
 - Use of the next generation nuclear power technology, etc.



1. Dominates 70% of M/S in Korea(as of Doosan Fuel Cell's annual report), the World's No.1 hydrogen fuel cell power equipment supplier(50MW daesan Hydrogen fuel cell power plant)

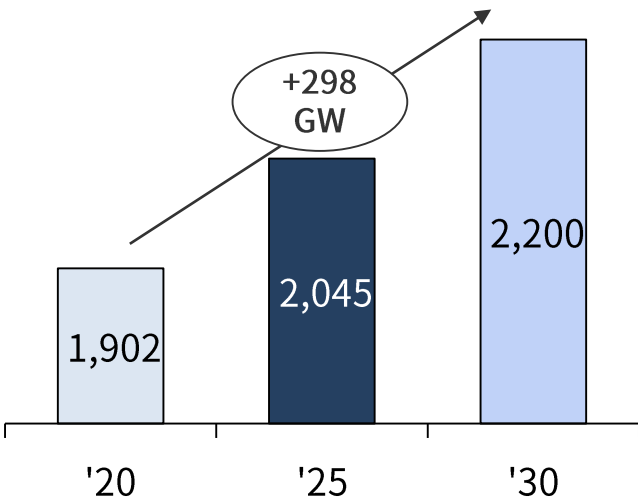
Gas Turbine

Target to rank as a global Top 4 through the independently developed gas turbine, an essential power source in a course of energy transfer such as coal power reduction, renewable energy expansion, etc.

Market Forecast

Forecast the global gas orders increase to respond to load variability due to coal power replacement and new/renewables' increase

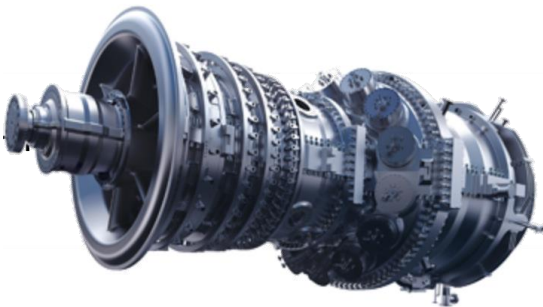
Global Gas Power Equipment Capacity¹ Unit (GW)



G/T Development and Situation

LNG
G/T

- Completed to develop the large sized G/T independently in '19
- Shipped to Gimpo Cogeneration facility in '21
- Upgrading to the top-tier level's super high efficiency model



Upgrade Target

380MW	12 Min.
Capacity	Start-up Time
>43%	>63%
Simple Power Efficiency	Combined Power Efficiency
50MW/min	
Load Increase Rate	

Hydrogen
Turbine

- Propel to develop hydrogen turbine linked to G/T to achieve the mid-long term carbon reduction
- Complete to develop hydrogen turbines for large sized dual fuel and small sized single fuel by '25



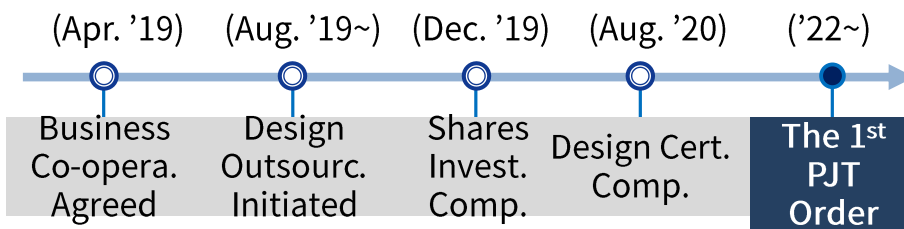
1. '20 IHS Markit Data

The Next Generation Nuclear Power and Nuclear Power Export

Forecast new nuclear power construction's demand to maintain for carbon reduction target achievement and target of securing energy security. Hold the Global top player position, backed by large sized nuclear power export and the next generation mid/small sized nuclear power market domination in advance

The Next Generation Nuclear Power(SMR)

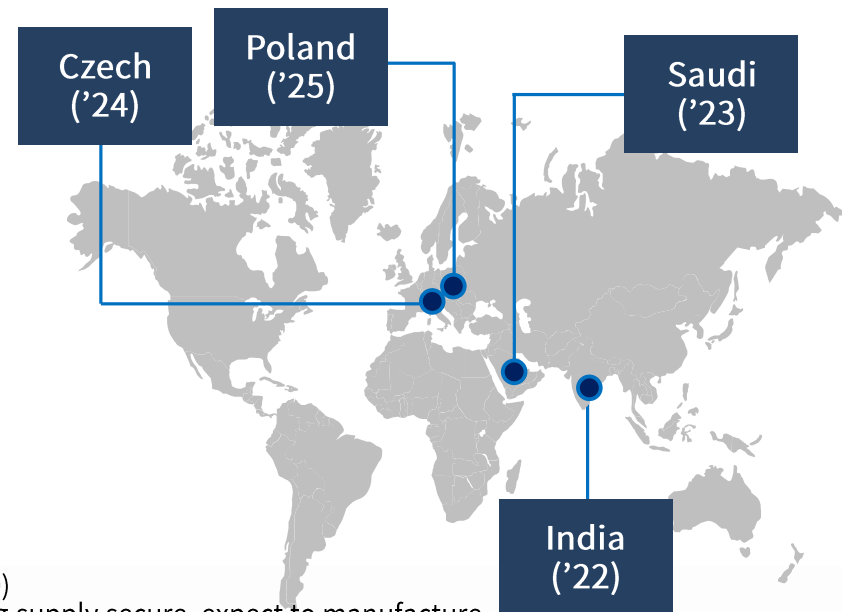
- Forecast SMR's expansion of introduction due to strengthened safety, initial investment cost reduction and construction period reduction
- The most¹ commercialized model by the US government's wholehearted support(NuScale)
 - The most initiative manufacturing partner² company to NuScale



- Moreover, participate into Korean government's SMR business³ and partnering with other global SMR developers

Large sized Nuclear Power Export

- Commence the successful commercial operation of Barakah nuclear power in the UAE
- Participate in Team Korea for nuclear power export target countries and under customized sales activity to foreign EPC players



1. Completed US NRC's 1st SMR's design certification (Aug. '20)
2. Completed shares investment and the initial manufacturing supply secure, expect to manufacture and supply for more than 5 PJTs until '30
3. SMART nuclear power(small sized light water reactor), i-SMR (innovative small sized module reactor)

Table of Contents

- DHIC 1Q result
 - Summary
 - Major results
- Financial structure improvement
- '21 Business plan
- New business
 - New/renewable, Hydrogen, GT, SMR
- **Back up**

B/S (Separate)

(Unit : KRW B)

	end of '20	'21.1Q	QoQ
Current assets	2,970	3,548	578
Cash & cash equivalents	399	712	313
Non-Current assets	8,177	8,222	45
Total assets	11,147	11,769	622
Total liabilities	7,686	8,199	513
Net-debt	4,470	4,423	-47
Total equity	3,461	3,570	109
Total liabilities and equity	11,147	11,769	622
Total L/E ratio	222.1%	229.7%	7.6%p

B/S (Consolidated)

(Unit : KRW B)

	end of '20	'21.1Q	QoQ
Current assets	9,947	11,523	1,576
Cash & cash equivalents	2,677	3,436	759
Non-Current assets	15,620	15,886	266
Total assets	25,567	27,409	1,842
Total liabilities	18,461	19,906	1,445
Net-debt	7,407	7,053	-354
Total equity	7,106	7,503	397
Total liabilities and equity	25,567	27,409	1,842
Total L/E ratio	259.8%	265.3%	5.5%p

Q&A